

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-4. (Canceled)

5. (Currently amended) An isolated nucleic acid encoding a polypeptide having at least 95% amino acid sequence identity with a polypeptide selected from the group consisting of:

- (a) a ~~human or mouse~~ CatSper3 protein;
- (b) at least a transmembrane domain of a ~~human or mouse~~ CatSper3 protein;
- (c) at least an extracellular loop of a ~~human or mouse~~ CatSper3 protein; and
- (d) at least a pore region of a ~~human or mouse~~ CatSper3 protein;

wherein said CatSper3 protein is encoded by SEQ ID NO: 1 or SEQ ID NO: 3.

6-74. (Canceled)